7th UCAAT User Conference on Advanced Automated Testing

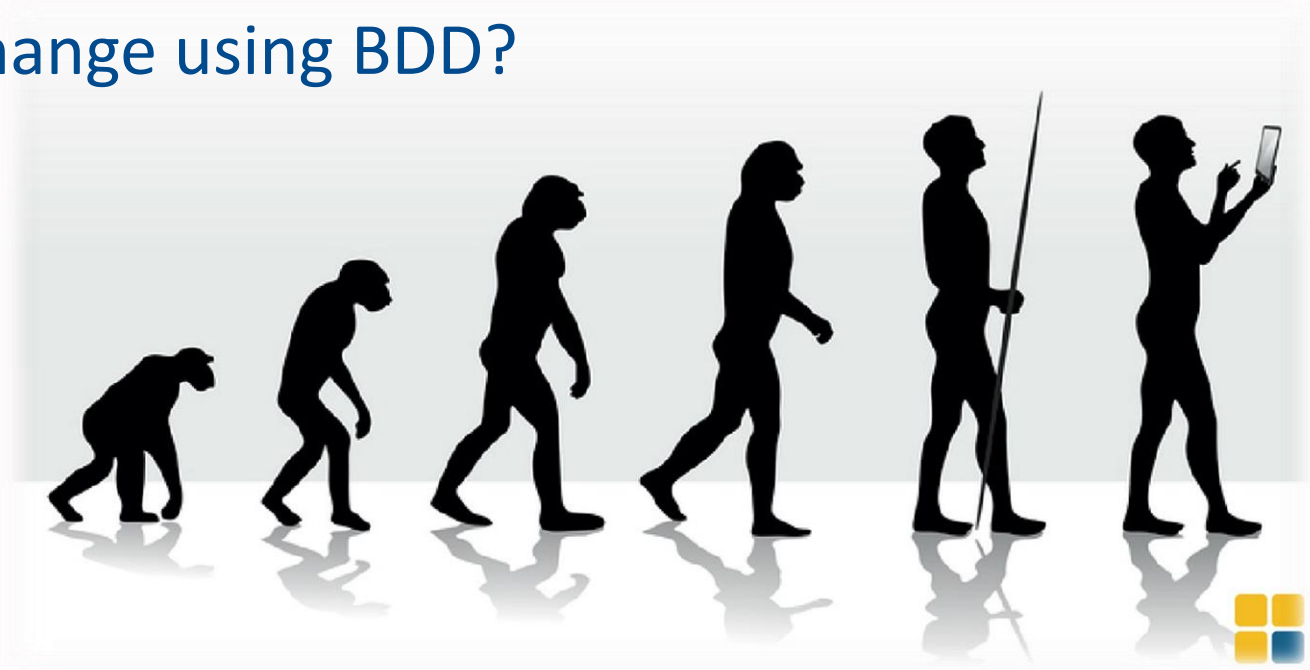
ETSI

IS POSSIBLE TO CHANGE A TESTER TO A QA ENGINEER USING BDD?

Presented by Ricardo Cristalli

Agenda

- Is possible to change ?
- Do we need ? Why ?
- How do we change using BDD?



My personal changes…

So we need to change ?

"Times change, we need to change as well."

If change is the only constant, why do we resist it so much ?

Transition Program

Tester → **Engineer**

Why we need that ?

Trends...

Test analyst (testers)
or Quality Engineer

What changes for us with these trends?

Testers don't break the code, they break your **illusions** about the code.

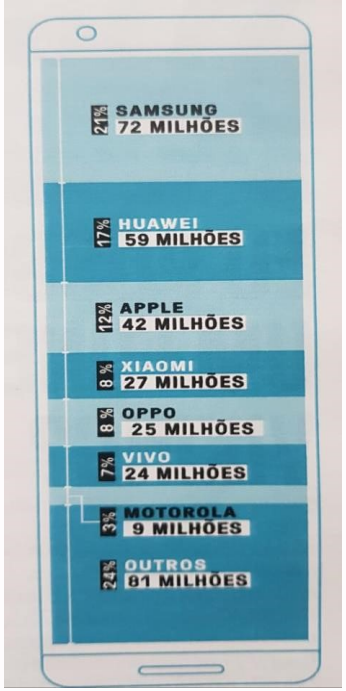
- Adapted from James Bach


Incrível: Nokia lança celular que envia mensagem de texto para outro celular

IBGE: até o final ao ano, em cada 50 mil casas, 1 terá acesso à internet

Especialista alerta: Quem não tem curso de datilografia ficará de fora do mercado de trabalho

Aprenda a compactar uma música para caber em 3 disquetes



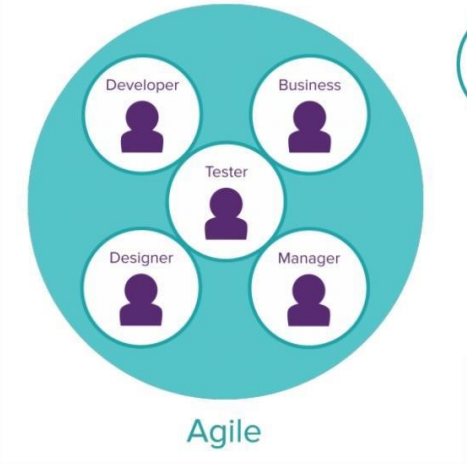
Super Interessante – Ed. 404Julho 2019

Bill Gates Admits That His Biggest Mistake Was Letting Android Win, Costing Microsoft $400 Billion

Jeb Su Subscriber
Enterprise & Cloud
Principal Analyst and Technology Futurist at Atherton Research

During a recent discussion at the Economic Club of Washington, Bill Gates claimed that his biggest mistake ever was not beating Android in the mobile computing market.

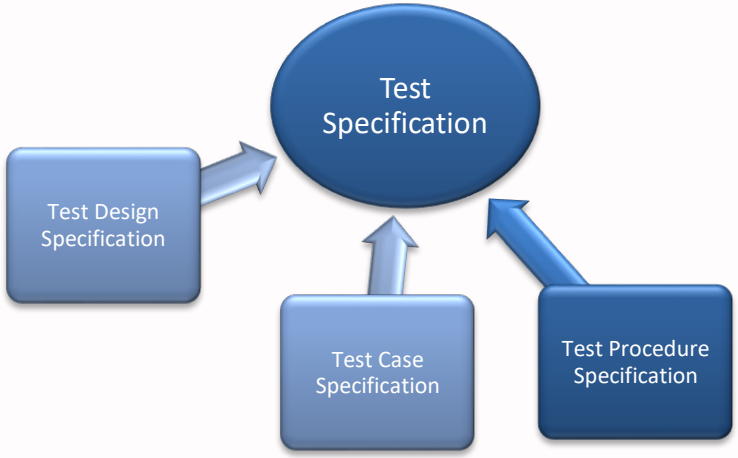
Where are we going !!!!

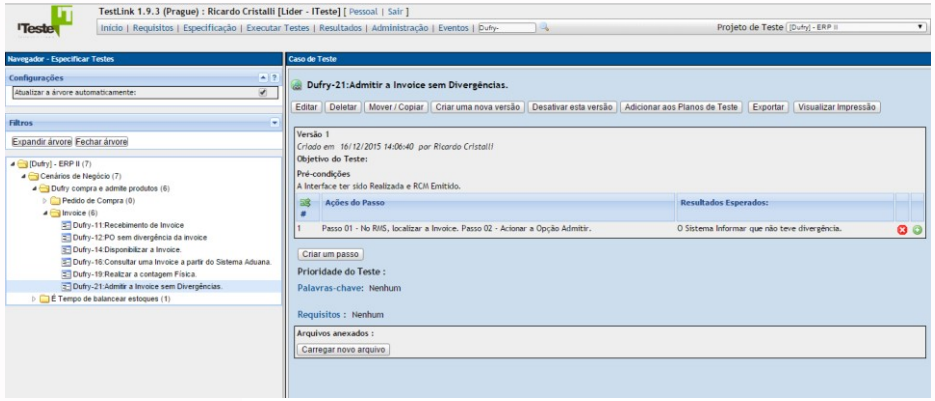


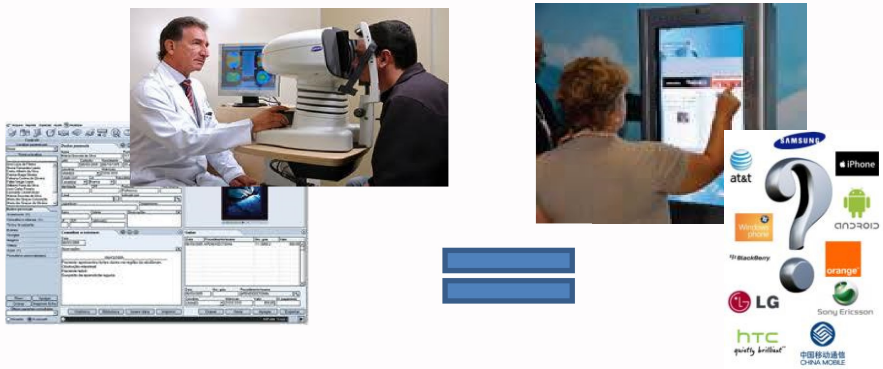
A lot of cross platform integration

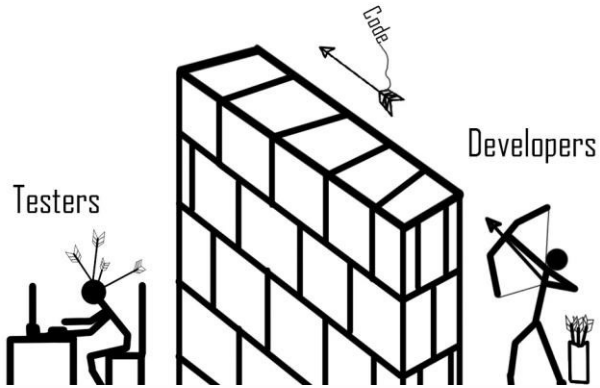
References
The Pratical Guide to Testing in DevOps - Katrina Clokie
Forecast 2019 Global Tech M&A Report – Janeiro 2019

Traditional way...

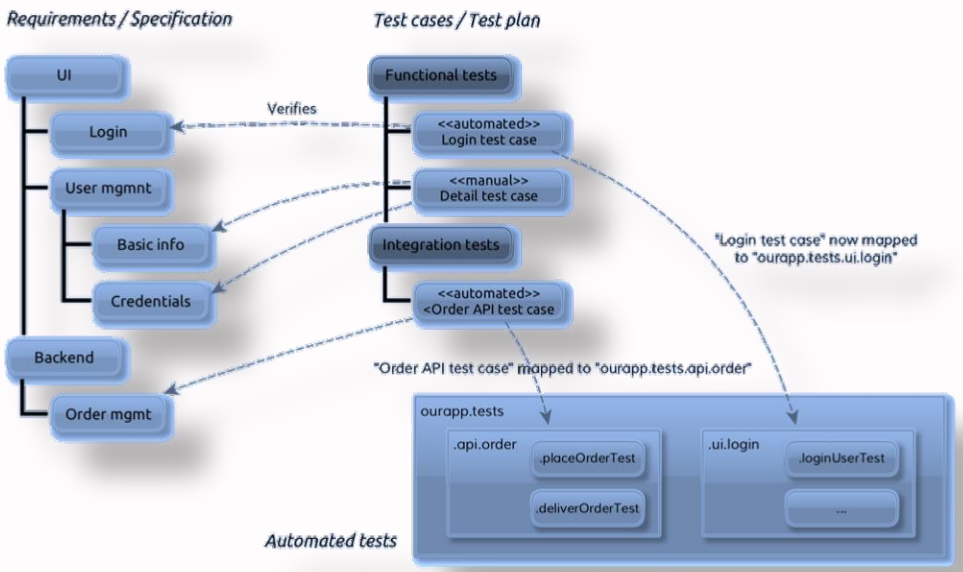


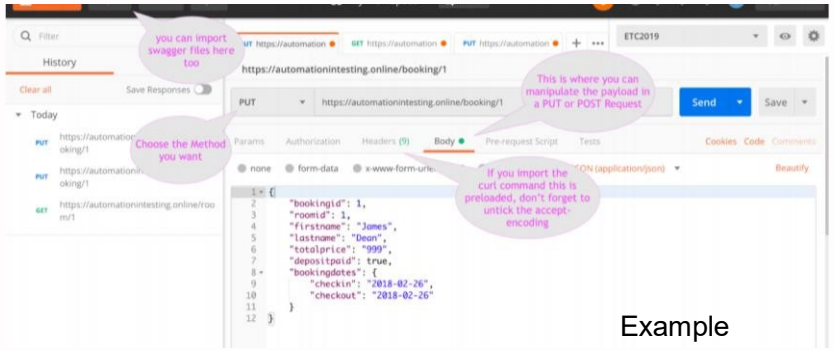






Where we need to go...

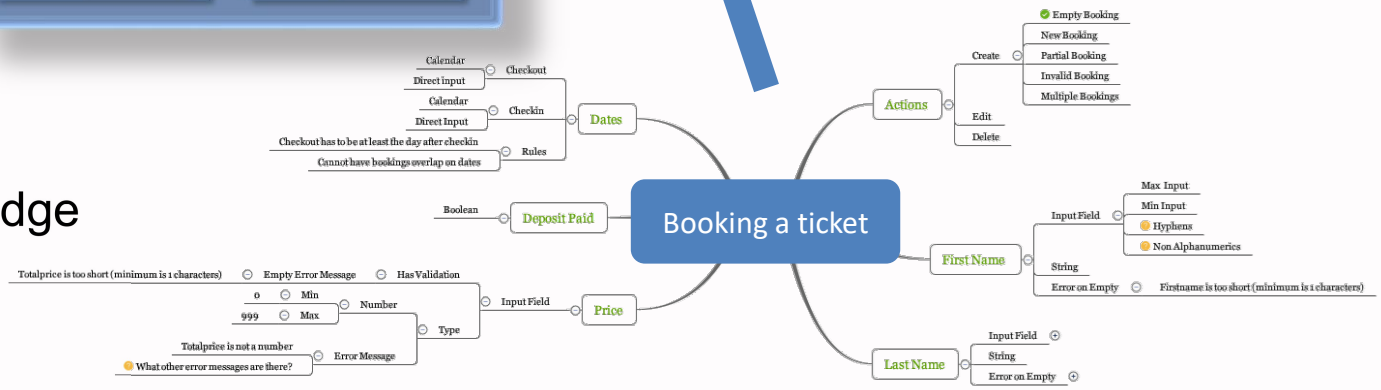




Example

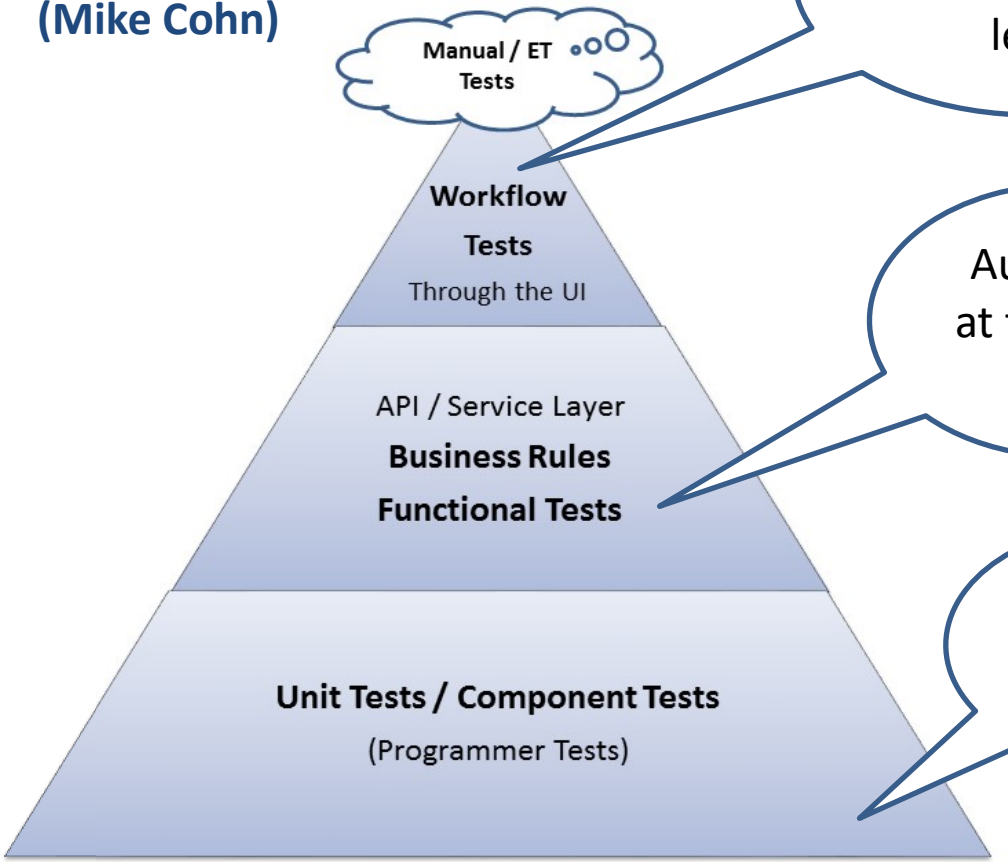
API Testing

business knowledge



We need to push the tests lower

Test Automation Pyramid (Mike Cohn)



Automate at the feature level

Automate at the story level

Automate at the task level

Agile Testing for the Whole Team
by Janet Gregory and Lisa Crispin

So we need to change the mindset...

- Why do we care about it ?
  - Customer satisfaction
  - Project should end successfully all the time
  - Complex new different software products
  - Different size, different teams, different locations and distributed development

Why we chose BDD as a way to change the mindset ?

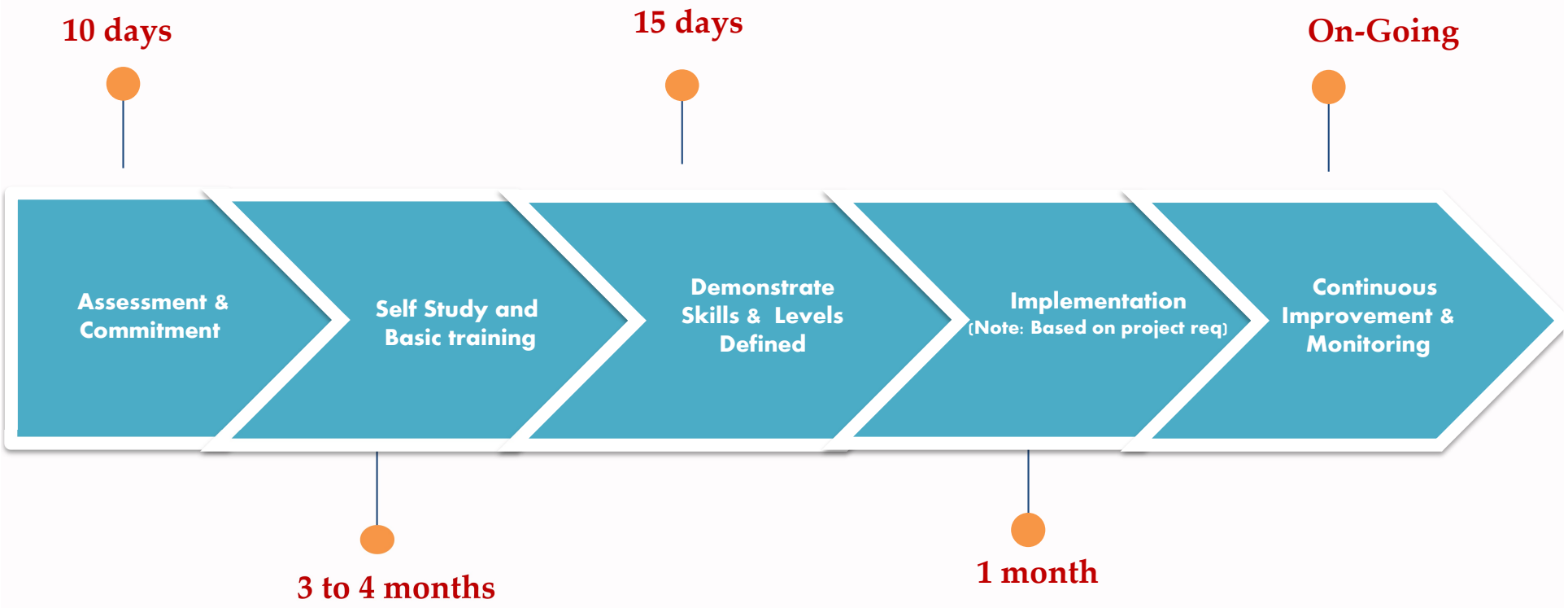
- BDD is Not About Testing!!! - Its about Quality
- Finding a Middle Ground between Exploratory Testing and Total Automation
- Added value in the testing practices (Quick reporting and analysis, Reliability and Speed and Test suites maintenance)
- Help understanding what is important for the client
- Creating features with the use of Examples
- Fully understanding what Features are important to the Customer

What needs to change with BDD approach

- Testers need to start looking at how do we prevent defects rather than finding them.
- Be part of the BDD discussion and assist the team in building the best system possible, guiding them from a testers perspective
- Testing needs to becomes an engineering discipline

The way ....

Training process



Candidates / Tools Assessment & Commitment

Phase – I

- **Program Committee:** A team will be formed to manage this overall program
- **Candidate Selection:** We go through few ways to get the Most Valuable Candidates…
  - Skill Assessment Metrics (Derived from our Metrics Reports)
  - Manager`s Feedback (All Participating Site Managers/Managers)
  - Volunteering to the program via survey
  - Interviews: Gauge Interest and take Commitment on self learning (Program Committee)
  - Target 5 to 10 Candidates
- **Tools / Technology:**
  - Selenium Web-driver tool , Robot Framework , Python Language, UI/API automation.
  - Additional skills: Building Framework, SQL, CI/CD, Microservices Process, Knowledge on Agile, etc..
- **Commitment:** This will be done in the final interview /selection process
  - The Participating candidate`s are required to verbally confirm to fully commit at will and "Agree" to follow the Program requirements and Expectations.

Self Study and Basic training

Phase – II

Self Study:

- Provide necessary help & support, learning tools and technology.
- Providing materials and guidance on installing tools
- Troubleshoot issues related to Installation & hardware support

Expectations:

- By the end of this phase: Individuals must have completed courses and understand Beginners Level and Intermediate Level concepts of automation on prescribed languages, tools & technologies.

On-Site Training:

- Provide a on-site trainer on weekends or after work hours up to 8 hrs. (2 or 3 sessions)
- Advanced Concepts will be taught/revised and at the end of the session, a demo application provided to be automated and demonstrate the skills by each individual participants.
- Creating and executing test script`s, debugging skills/understanding code, data source interactions, web driver usage, defining page objects, report generation, CI/CD process".
- At the end of this phase: All participants should have completed their demo application automation and advanced concepts. Including but not limited to these skills…

Demonstrate Skills & Levels Defined

Phase – III

Demonstrate Skills:

- During this phase: Individuals should submit their training reports and additional skills achieved.
- By end of this phase each individuals should be able to automate tasks and also be able to pick and learn new tools and systems closely related to automation testing.

Levels Defined:

- During this phase the management will assess based on the performance of the individuals
- A leveling guideline is used, to assign titles for these individuals , each title will come with its roles and responsibility that will be strictly followed.

Implementation

Phase – IV

During this Phase:

- The Individuals are moved into Automation Projects on different client locations based on the Business Requirement and Project needs.

The Expectations from the individuals includes:

- Should be able to perform tasks in the Language`s and tool`s they have gained Knowledge.
- Should be able to pick the automation work quickly and efficiently.
- Should be able to Create New & Update test cases over the manual test scripts.
- Should be able to perform tasks on their own with minimal help from other individuals on developing automations.

Continuous Improvement & Monitoring

Phase – V

Continuous Improvement & Monitoring:

- Closing working to help the individual`s performance
- Provide help clearing impediments when occur.
- Closely monitor the Progress of the Individual to help success them along the whole Process
- Make sure the Roles and Responsibilities are duly met by the chosen individuals

Key Process outline

- Determine a team Committee to Move this Program
- Determine Road-Map for Automation Projects Expansion.
- Regular follow-up meeting by Program team Committee on all the stages and document the progress & status.
- Track Take-away`s from the Program`s first run and Enhance it in next run.
- Next Phase: Include Performance, Security, Algorithm along with Automation to the program.

Goals

- The QA engineers are more critical
- Talk more with the team members
- Look through the eyes of the customers
- Are more prepared to explore and stimulate curiosity
- Collaborate more on group dynamics, enhance emotion management, and align values better
- Boundless ideas - guarantee freedom, security and trust

Thank you !